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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,679	12/17/2003	Hideko Inoue	740756-2689	4095

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NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,679

Applicant(s)

INOUE ET AL.

Examiner

Marie R. Yamnitzky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006 and 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This Office action is in response to applicant's amendment filed January 04, 2006, which amends claims 1, 16, 18, 19 and 22.

Claims 1-3 and 11-22 are pending.

2. This Office action is also in response to the certified translation of applicant's foreign priority application JP 2002-368990, filed January 09, 2006.

3. The rejection of claims 18 and 19 under 35 U.S.C. 112, 2nd paragraph, as set forth in the Office action mailed October 07, 2005, is overcome by applicant's amendment filed January 04, 2006.

The rejection under 35 U.S.C. 102(e) based on Hamada et al. and the rejection under 35 U.S.C. 103(a) based on Hamada et al. in view of Yamazaki et al. or Kamatani et al. are withdrawn in view of the certified translation of applicant's foreign priority application. The foreign priority application supports the present claims and was filed prior to the U.S. filing date of Hamada's application.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-3 and 11-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US 2002/0034656 A1) for reasons of record in the Office action mailed October 07, 2005.

6. Claims 17-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US 2002/0034656 A1), further in view of Yamazaki et al. (US 2001/0050373 A1) or Kamatani et al. (US 2003/0059646 A1), for reasons of record in the Office action mailed October 07, 2005.

7. Applicant's arguments filed January 04, 2006 have been fully considered but they are not persuasive.

Applicant argues that paragraphs [0172]-[0173] of the Thompson et al. publication only disclose compounds of the formula L_3M , and fail to teach or suggest L_2MX and a substituent R_2 limited to an alkyl group, an aryl group, a substituted aryl group, a heterocyclic group or a substituted heterocyclic group for these compounds. Applicant argues that the phenylimine formula in Thompson's Fig. 49, which is for compounds of the formula L_2MX , does not disclose or suggest the ligand of the formula 2 of the present independent claims. Applicant argues it is not appropriate to combine the formula in paragraphs [0172]-[0173] with the compound of formula L_2MX because Thompson et al. do not teach or suggest doing so.

Applicant further argues that the rejections are based on hindsight.

Applicant further argues that the organometallic complexes of the present invention can obtain white or whitish luminescent material, and the applied prior art does not teach or suggest white or whitish luminescent material.

The examiner agrees that the prior art does not disclose or suggest an organometallic complex of present formula 2 in which R_2 is a substituted or unsubstituted heterocyclic group. However, the examiner respectfully disagrees with applicant's arguments that the prior art does not suggest an organometallic complex of present formula 2 in which R_2 is an alkyl group, an aryl group, or a substituted aryl group.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the present case, Thompson et al. disclose complexes of formula L_3M and complexes of formula L_2MX (e.g. paragraphs [0052] and [0058]-[0059]). Thompson et al. teach that the appropriate selection of L and X allows for color tuning of the complex L_2MX relative to L_3M (e.g. paragraph [0058]). Thompson et al. disclose phenylimine ligands for the L ligand of a complex of formula L_3M or a complex of formula L_2MX (e.g. Fig. 49 and paragraph [0172]). While the phenylimine ligand shown in Fig. 49 is slightly different than the phenylimine ligand

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shown in paragraph [0172], one of ordinary skill in the art at the time of the invention, considering the teachings of Thompson et al. as a whole, would have reasonably expected that the phenylimine ligand shown in paragraph [0172] could be used as the L ligand in a complex of formula L_2MX . One of ordinary skill in the art at the time of the invention would have reasonably expected that color tuning could be achieved as taught in paragraph [0058] by replacing one of the L ligands in the L_3M complex shown in paragraph [0172] with an X ligand. Further, one of ordinary skill in the art would have reasonably expected, based on the teachings of Thompson et al., that color tuning would be influenced by the choice of substituents on the phenylimine ligand, and Thompson et al. specifically teach alkyl and aryl substituents for a phenylimine ligand (e.g. paragraph [0173]).

With respect to the feature of white or whitish emission, the examiner notes that the present claims do not limit the color of light emitted from the claimed complex or device, the present disclosure describes specific emission characteristics for only one specific complex within the scope of the present claims, and complexes suggested by Thompson et al. that are within the scope of complexes of formula (2) as defined in the present claims will inherently have the emission characteristics of those complexes.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
March 13, 2006



MARIE YAMNITZKY
PRIMARY EXAMINER

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